

Intelligent eBusiness

Customer-Centric eBusiness for Sustainable Growth and Profitability

June 1999

WHITE
paper

THIS PAGE BLANK (USPTO)

Table of Contents

Executive Overview.....	1
Sustainable Growth with Profitability.....	2
Why are Current eBusiness Solutions Falling Short?.....	2
The Customer's Perspective	2
The Supplier's Perspective—eTail Companies.....	3
The Supplier's Perspective—Bricks & Mortar Company.....	4
Summary.....	4
What is the Solution?.....	5
Customer-Centricity.....	5
Operational Excellence.....	6
Internet Fulfillment.....	7
Trading Communities.....	7
Benefits.....	8
How Does This Fit with the Concepts of "Business-to-Business" and "Business-to-Consumer"?	8
Why is i2 Uniquely Qualified?.....	8
i2 Solutions.....	9
Software, Implementation and Support Services.....	9
Supply Chain Management.....	9
Customer Management.....	11
Product Lifecycle Management.....	12
Strategic Planning.....	12
InterProcess Planning.....	12
Services.....	12
Private Exchanges.....	13
Public Exchange.....	14
The Underlying Technology— RHYTHM Tone™.....	14
Partnerships.....	14
How Do You Get Started?.....	15
Business Release Methodology.....	15
Strategic Opportunity Assessment.....	15
Industry Examples.....	16
Automotive.....	16
Hi-Tech/Electronics.....	16
Metals.....	16
Sewn/Soft Goods (Also Known as Textile and Apparel).....	17
Summary.....	17

Executive Overview

The Internet has radically transformed the way corporations attract and keep their customers. Without a doubt, corporations have a tremendous opportunity to quickly enter new markets, establish competitive dominance and solidify customer and partner relationships. But the promise of eBusiness has just begun to be realized.

Although there are a number of companies that use the Internet as a sales channel, few have been able to match Dell's record of sustainable growth with profitability. The main reasons for this type of growth lie in a holistic approach that fully leverages all aspects of the Internet.

What are the components needed for this holistic approach? First, you must understand your customer and their needs while providing them with the information and tools to remain loyal. This **Customer-Centricity** is achieved through tools and services such as: smartstore fronts, multiple product configurations, cataloging & catalog search engines, real-time available to promise, customer care services and comparative shopping tools.

Secondly, you must be able to deliver on your promises while remaining profitable. This **Operational Excellence** is achieved with end-to-end, scalable optimized supply chain management including: real-time quoting and reservations, optimized supply chain planning, advanced collaboration with trading partners and profit mix validation.

Thirdly, you need to link customers to one or multiple supply chains in order get optimal customer service through visibility into the fulfillment process. This customer linkage is done through **Internet Fulfillment** that provides features such as: on-line, real-time quoting and reservations, integrated with logistics to support merge in transit.

Finally, you need to work within your trading communities to share as much information as possible to anticipate actual demands. These **Collaborative Communities** can either be Private (e.g., automotive network) or Public (e.g., semiconductor manufacturing outsourcing). However, since many participants in these communities may not have the IT resources available to fully participate in these communities, hosting services need to be provided.

How does this fit into a Business-to-Business (B2B) and Business-to-Consumer (B2C) view of the world? The same four components exist within both categories. Moreover, as companies link together electronically, and some even start selling direct, the B2B and B2C distinctions blur to the point of becoming irrelevant.

If you are a "bricks and mortar" company, i2 Technologies has the solution to quickly install the customer-facing solutions you need, while integrating this with your back-end systems or upgrading your systems to have state-of-the-art supply chain planning. If you are an eBusiness company, i2 provides the back-end systems to provide real-time fulfillment with known costs. Our 11 year track record puts i2 on target to provide their customers with over \$50 billion in value by the year 2005.

Sustainable Growth with Profitability

Why are Current eBusiness Solutions Falling Short?

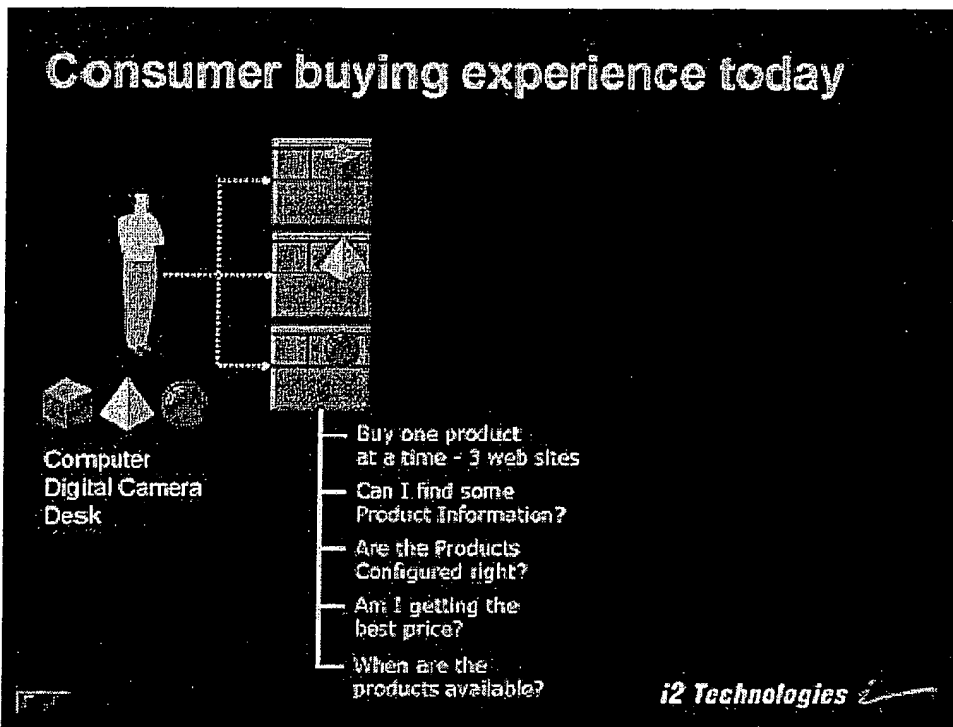
Over the last few years, entrepreneurs have started Business retail ("eTail") companies which focus on the consumer buying experience. At the same time, "bricks and mortar" companies have approached the Internet from the perspective of opening a new channel for their products, basically as a defensive move against eTailers. Although both have approached the Internet from two different perspectives, both face challenges when conducting business over the Web.

End consumers and company buyers have never before had more information at their fingertips. Although there is a plethora of information, the real untapped value is in having the exact information you require presented to the web-site visitor, such as the best delivered price with a feasible delivery date for a set of products.

The Customer's Perspective

End-consumers and company buying agents have flocked to the Internet because of the wealth of information and the breadth of competitive suppliers. Initially, users have spent significant amounts of time searching out products and services. More recently, more complete catalogs and better search engines have become available. However, there are still a number of shortcomings:

- limited Available-to-Promise (ATP) information, especially when configuring a product
- no direct link to transportation or information on arrival and delivery due-dates
- no ability to link multiple purchases together including delivery options
- feedback and responses are slow (scalability is a big issue)
- no true comparative shopping engines, looking at real-time information, not just catalogs, including:
 - delivery options
 - product availability
 - total delivered costs



As an example, if you wanted to equip a home office with a customized desk, a computer and its complementary components, including a digital camera, you would most likely be faced with buying from three different Web sites. Also, if configurations of each product were possible, they may not be available. Ideally the solution would be able to return alternatives that come close to your ideal needs, or suggest different products based on current stock and supply chain constraints. Finally, once the configuration has been settled on, the solution should be able to provide delivery status and exception handling in the event of disruptions.

The Supplier's Perspective —eTail Companies

For eTail companies, market share is king. Almost every eTail company talks of losing money on operations but making up for it in volume and advertising. This focus on market forces comes at a tremendous cost as they have typically not paid significant attention to the operational side of the business. Their systems have failed because:

- there is limited integration of the back-end operations to the sales side, causing:
 - unrealistic due dates promised, especially when products are configured to order or are shipped from another supplier
 - estimated due dates, without actual transportation dates and actual costs
 - no ability to coordinate multiple line items, therefore transportation costs are not minimized
 - no ability to see from the web site the progress of the order or the exact delivery status

- no coordination between trading partners, which would enable them to maximize customer service and minimize costs
- they have little ability to provide advanced customer-centric solutions such as cross-selling and up-selling, causing potential customers to seek out other sites
- they have little customer care, causing customers to find alternative sites
- the product mix has not been analyzed for profitability, allowing products to be sold at a loss

The Supplier's Perspective —Bricks & Mortar Company

Traditional firms are faced with two issues: How do I set up an appealing site in a whole new market, and then how do I satisfy demand profitably? Their existing systems fail to meet these needs because:

- they do not have the customer-facing applications tailored to individual customers
- they are not scalable—they cannot handle the huge volume of orders and inquiries that the Internet provides—which results in lost sales
- the existing systems are designed to provide information in minutes or hours while Internet users require responses in less than a second, which results in lost sales
- there is little or no communication between trading partners on upcoming forecasts, product introductions and phase-outs, or sales promotions, resulting in higher inventories and reduced customer service

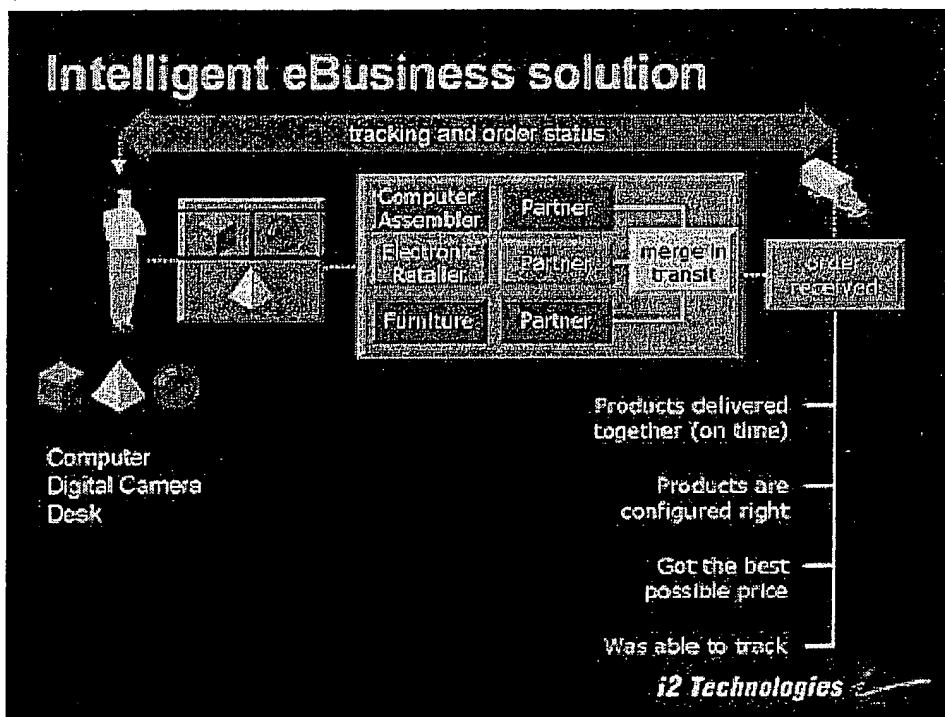
Although these firms have the infrastructure to defeat the eTailers, they have failed to capitalize on this advantage as they have focused less on the front-end customer-centric solutions than the eTailers.

Summary

The net result today is that most companies are struggling to provide the customer-centric Web sites that breed loyalty, while having the operations that can fulfill these needs at a profit. What is needed is a holistic view to supply and demand that spans both requirements. No longer can we look at these as B2B and B2C, as the line has become blurred to the point of irrelevance.

What is the Solution?

The solution is to provide customer centricity married with operational excellence, providing collaborative communities to form an integrated, scalable, intelligent eBusiness package. How is this possible? By providing scalable, Java based integrated components for the front-end that meet the customer facing needs, along with the back-end intelligent operational planning solutions, it is **possible to make your company growth oriented, in a sustainable manner. At the same time**, integrating your company with your trading partners, including end-consumers, can be done through collaborative communities or markets, whereby both strategic information and spot transactions can be exchanged.



Customer-Centricity

In the past, customer centricity on the Internet was focused on the look and feel of the web page. Over time, companies have learned that the whole shopping experience, for both end consumers and buyers, must become seamless and complete. For that to happen, the following components must be available:

- smart store fronts that self-tailor to individual user needs and provide up-selling and cross selling options
- secure transaction handling (credit cards, etc)
- customer care solutions that provide self help as well as such non-sale processes as returns
- integrated configuration engines for products and services
- intelligent comparative shopping engines that seek out real-time information on product price and availability.

- use of recently updated catalogs when real-time Available-To-Promise (ATP) engines are not available
- links to operational planning solutions to provide information on:
 - product availability and status
 - configuration options
 - product or service specifications (may include Request For Information - RFIs)
 - order status and notification of problems

Customer service improves by providing the right products to customers with real-time information including delivery of multiple items from multiple vendors in a single shipment. A significant benefit of this is that customer conversion rates improve. With typical conversion rates running at 1.6 percent any increase in this number will result in a huge increase in revenues. Also, by providing customer care solutions including order status and notification, customer issues will be reduced, further increasing customer loyalty while reducing customer care costs.

Operational Excellence

Supply Chain Planning and Optimization systems have helped leading edge companies become operationally excellent. Best-in-class memory resident applications must be able to provide the ability to:

- forecast demand using mathematical tools in a collaborative framework
- plan distribution and manufacturing in a holistic approach across an entire supply chain to maximize customer service and minimize costs
- provide real-time, scalable Available-To-Promise (ATP) information including the ability to prioritize allocation by customer category (i.e., Platinum, Gold and Silver customer categories), maximizing margins
- provide insight into future optimal customer mix, to profitably maximize customer service where margins are greatest
- optimize transportation to reduce costs while meeting customer service requirements and promises
- provide end-to-end process monitoring and exception reporting, including manufacturing and transportation across multiple sources

By providing all of these functions, companies can provide superior customer service at minimized costs. Then, with integrated product mix simulation, companies can ensure that future margins on a product-by-product basis will be at acceptable levels.

¹ The percentage of customers that turn from visitors into purchasers.

² Source: Shop.org

Internet Fulfillment

The advantage of brokers and marketplaces is that they provide one-stop shopping. What is needed is an Internet-based broker that searches both catalogs and ATP engines across heterogeneous supply chain networks to provide not only possible products at the best price, but available products at the best price. These applications must be able to:

- match demand specifications to available products in catalogs, increasing the chances of finding the best available product/price combination
- determine availability from ATP engines, increasing your customer service
- determine pricing from the ATP inquiry, increasing your cost accuracy and margins
- determine shipping options and incorporate this into the price selections, increasing your cost accuracy and margins
- merge multiple products in transit to facilitate one delivery, reducing costs, and increasing customer convenience

The advantage of an Internet Fulfillment Server is that it allows you to offer your customers full service with best available pricing and service. Additionally, you can tailor the Internet Fulfillment Server to cross-sell and up-sell products that can add both revenue and margin.

Trading Communities

The popular belief today is that trading communities are markets for buying and selling either products or capabilities. Although these trading communities do offer efficiencies, as can be seen with Maintenance, Repair and Operations (MRO) sites and such auction sites as eBay, more value can be found in collaboration between companies. Intelligent Business goes beyond spot market trading into exchanges of complex data. These exchanges must include the ability to:

- support real-time exchange of complex data in multiple formats, including complex objects, EDI, formatted email, secure HTML,
- support processes to exchange
 - manufacturing/distribution information including,
 - demand/forecast information
 - manufacturing/distribution plans and schedules
 - order information
 - product life cycle information including
 - product introduction plans
 - product phase-outs with versioning
 - support of MRO trading of inventories
 - support of outsourcing to single or multiple companies
 - support of auctioning (low priority, typically)
 - support of both Private and Public exchanges
 - support application hosting for companies that choose to outsource applications
- empower customer service across multiple enterprises through availability of order information, via self-service and customer "help-desk" applications

Benefits

The net benefits of such a holistic, integrated intelligent system is unprecedented customer service as end-consumers and buyers get access to best available products while minimizing costs. Suppliers can realize huge revenue growth opportunities at managed margin levels, while minimizing costs.

How Does This Fit with the Concepts of "Business-to-Business" and "Business-to-Consumer" ?

The same four components exist within both "Business-to-Business" (B2B) and "Business-to-Consumer" (B2C) categories. For example, in a B2C world, you must build a customer-centric site with seamless links to the organization. Once the "order" is taken, this needs to be related back throughout the supply chain, either through a private or public exchange, to promise timely and cost effective delivery. Additionally, such trading sites as eBay are examples of "spot" collaboration communities in the B2C world.

In the B2B world, there is still a customer view, which is often more sophisticated than B2C, as companies are dealing with professional buyers. These additional tools include the ability to handle Requests for Information (RFIs). Then, B2B must involve operational excellence on the execution and coordination of orders.

Moreover, as companies link together electronically, and some even start selling direct, the B2B and B2C distinctions will become very clouded to the point where there is no distinction.

Why is i2 Uniquely Qualified?

During the last 11 years, i2 Technologies has been delivering on our mission to provide \$50 billion in value to our customers. By listening to our customers' needs, i2 Technologies has delivered leading edge, innovative and highly scalable solutions.

i2 Technologies has the vision to meet the business needs of leading edge customers such as Hewlett Packard, IBM, Compaq, Dell and Visteon (Ford), including three Malcolm Baldrige award winners. And our status as the leader in supply chain management solutions was cemented by Gartner Group's "Magic Quadrant" analysis of the industry.

i2 is the only company with all the components and partnerships to deliver a complete end-to-end solution including the features necessary to support customer-centricity, operational excellence, Internet Fulfillment and collaborative communities. These components, built during the last six years, have been field-tested and are able to meet the most demanding needs of clients, including 24 x 7 availability.

As the recognized leader in the Supply Chain market, i2 has the widest and deepest selection of intelligent, scalable planning solutions available. With more than 700 installed customers, these solutions have a proven track record. Additionally, i2 has spent approximately 30 percent of revenues on Research and Development. At i2's current rate of growth, this would extrapolate to more than \$150 million in 1999 - more than any other competitor spends on R&D.

i2 has a long and impressive track record of success with customers. Part of that success comes from focusing on certain industries and their industry-specific processes. By building standard software solutions for these industries, i2 has been able to quickly meet customers' needs at reduced implementation costs. As an added benefit of this process, customers can leverage best-in-class processes from other industries to gain a significant competitive advantage.

Unlike many Internet companies, i2 is financially stable, with a solid track record of customer success³. And unlike Enterprise Resource Planning (ERP) vendors, i2 has continued to grow with very strong demand from our customers during the Y2K lead-up.

Quick payback on projects is key for our customers. i2 firmly believes that each project should add significant value for our customers and has built a Business Release implementation methodology that focuses on delivering quantifiable benefits in 60 to 120 day projects. This is certainly highly applicable in this space where rapid change is required.

Rather than delivering individual point solutions that are offered by other vendors that require exhaustive integration efforts, i2 is providing a holistic, integrated, end-to-end solution for intelligent eBusiness. With its financial stability, significant resources and clear vision, i2 is the only company that you should look at to provide the solution for your intelligent eBusiness needs.

i2 Solutions

i2 takes a holistic approach to providing solutions that enable sustainable growth at profitable levels. i2's RHYTHM solutions for intelligent eBusiness build upon a powerful foundation: eBusiness Process Optimization, or eBPO, for a competitive advantage across the enterprise. RHYTHM builds sustainable profitability by marrying the operational excellence, product leadership and customer intimacy of eBPO with today's leading high-performance, eBusiness solutions and services.

i2's approach has three thrusts: software, with implementation and support; services; and partnerships. As outlined in section 4, "How do I get started," these can be combined to form a tailored solution to address the business problems.

Software, Implementation and Support Services

The RHYTHM suite of software that supports eBPO⁴ is logically divided into five main processes, necessary to run any company:

- Supply Chain Management for *operational excellence*
- Customer Management for *customer intimacy*
- Product Life Cycle Management for *product leadership*
- Strategic Planning for *strategic, long-term decisions*
- InterProcess Planning for *the integration of all business processes*

Supply Chain Management

Supply Chain Management (SCM) involves the effective anticipation of market demand, the optimal positioning of enterprise resources to meet demand, and the efficient fulfillment of demand as it is realized. It is the comprehensive combination of all sub-business processes that enables velocity, i.e., the fast and intelligent exchange of information and the movement of goods and capital between end-consumer and component (raw-material) suppliers.

³ As of Q1 1999, i2 had recorded 21 consecutive revenue growth quarters and had \$125m in cash reserves with a market capitalization of \$2.2b.

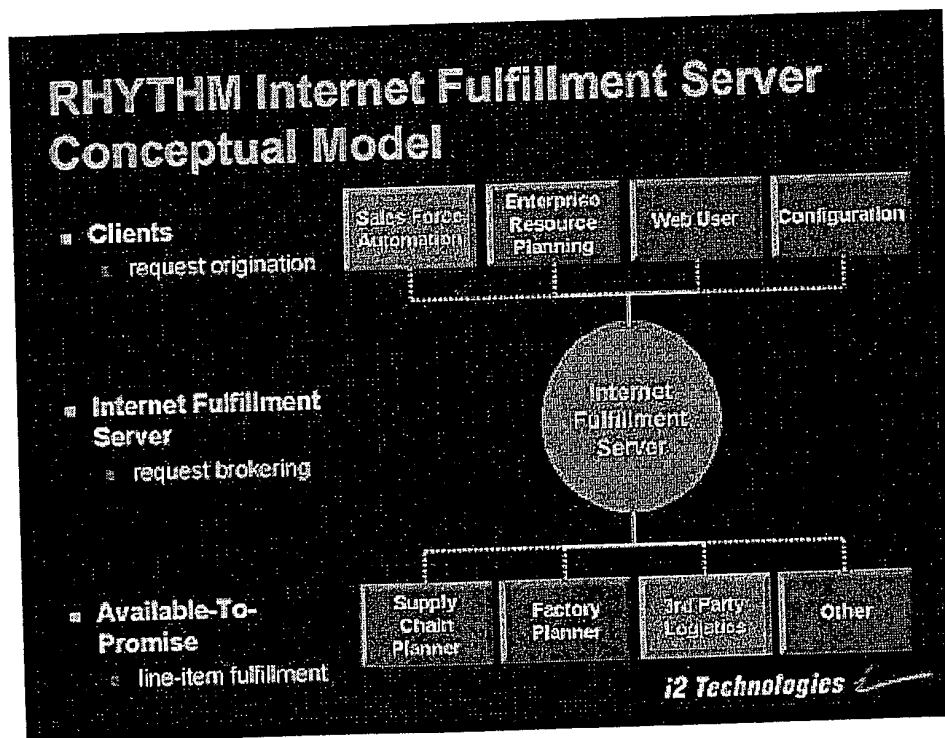
⁴ Please see the eBPO White Paper for more details.

RHYTHM Internet Fulfillment Server

The **RHYTHM Internet Fulfillment Server™** (IFS) is a solution that intelligently manages demand fulfillment in a physically distributed supplychain planning environment. It is a distributed, high performance adaptive manager that integrates the entire eBusiness workflow by bringing together multiple RHYTHM planning engines to create a single logical order promising and fulfillment environment.

The key competitive advantage of RHYTHM IFS is the intelligent allocation of material, capacity, and product availability along multiple dimensions including product hierarchy, customer hierarchy, time, alternates, substitutes, price point, and profitability. RHYTHM IFS also provides intelligent and configurable supply allocation search and consumption algorithms that balance customer service objectives and enterprise business objectives.

The RHYTHM IFS architecture provides a secure, scalable and high availability application environment that combines in-memory processing for speed with Data Base Management Systems (DBMS) access for data persistence and reporting. RHYTHM IFS also includes pricing and logistics coordination interfaces, and has the ability to operate in a standalone mode, or as the core order promising engine within an ERP, Configuration Management, or Sales Force Automation (SFA) application environment.



At the heart of RHYTHM IFS lies a new generation of planning systems and collaboration technology that creates the ability to provide:

- **Maximum Market Penetration/Share.** RHYTHM IFS, in combination with our Customer Management process solutions, provide a means of maximizing sustainable market penetration and market share. By providing a consistent and reliable fulfillment experience across the business, an enterprise can maximize the customer acquisition and retention equation.

- **Maximum Profit and Service Levels.** Along with increasing service levels, an enterprise can now maximize the margin side of the equation as well. More effective upstream processes of supply and demand planning reduce costs and cycle time. RHYTHM IFS can also make use of intelligent algorithms to allocate supply based upon profit objectives.
- **Maximum Visibility and Responsiveness.** The RHYTHM IFS solution provides unmatched visibility to the impact of supply and demand anomalies across the business. It intelligently assesses and responds to critical events using dynamic exception handling heuristics.

Thus, RHYTHM IFS provides unique value to the entire eBusiness workflow by bringing together multiple planning engines to create a single logical order promising environment.

Customer Management

RHYTHM Customer Management aims at creating long-term, profitable relationships with customers through increased customer intimacy and improved business effectiveness. It is a comprehensive, scalable solution that enables intelligent eBusiness by tying together front-end electronic commerce functionality with Internet-based demand fulfillment capabilities. RHYTHM provides:

- **A single view of the customer.** Providing a pervasively personalized view to a customer by taking everything an enterprise (Sales, Marketing, Service) knows about a customer and everything it knows of how to service that customer (supply chain, etc.)
- **Responsive.** i2's solutions provide real-time information to enable this intelligence
- **Extensibility/Flexibility.** i2 provides a complete Quote-to-Delivery solution, but can integrate with existing enterprise systems and capabilities where necessary

RHYTHM solutions provide extensive customization and personalization capabilities. This gives customers the power to view the enterprise in a way that they can relate to, thereby making it easier for them to do business with it, and creating stronger and more profitable customer relationships. Personalization is provided at three levels:

- **Static Personalization.** Uses pre-defined capabilities and user-selected customization
- **Dynamic Personalization.** Provides dynamic content insertion, cross-sell, service and care capabilities
- **Intelligent Personalization.** Matches the customer's demands with the corporation's capabilities

"Customer Centricity" through RHYTHM Customer Management

RHYTHM solutions for Customer Centricity are part of the Customer Management BPO process, and cover the following key requirements:

- Integrated demand creation techniques that bring together sophisticated demand forecasting with customer-driven management and account planning.
- Personalized self-service shopping and service solutions for customers and channel partners integrated with secure online transaction processing, order fulfillment, and order tracking solutions that allow you to:
 - Intelligently personalize the smart store-fronts and self-tailor the shopping experience to customer needs (businesses and consumers)
 - Customize the experience to provide up-selling and cross-selling options
 - Secure transaction handling (credit cards, etc) over a secured network
 - Provide customer care solutions such as self-help and non-sale processes such as returns

- Real-time, Internet-based configuration system (for multiple products) that can:
 - Determine feasibility, profitability, and delivery dates
 - Understand the constraints of the entire supply, production, and logistics chain across multi-channel, multi-enterprise systems
 - Provide cataloging and catalog search engines for comparative shopping
- Comprehensive service and support solutions, including product information, online registration, electronic help desk, self-service support and logging, field service scheduling, MRO (maintenance/repair/overhaul) planning, and service parts planning to determine stocking locations and optimal inventory levels based on predicted and actual service demand frequency.

The RHYTHM Customer Management solution increases profitability and boosts market share through:

- Increased revenues and reduced costs
- Increased return on service/support investments
- Increased customer satisfaction and responsiveness

Product Lifecycle Management

Product Lifecycle Management is a comprehensive and integrated suite of software solutions designed to support optimal decision-making during product development. Product Lifecycle Management is the only market solution that uses advanced planning and optimization tools to address the entire product lifecycle— from concept development, to launch, to phase out. By using i2's⁵ advanced technology and by integrating with key systems in the enterprise (including eBPO⁶ and ERP⁶ systems), Product Lifecycle Management maximizes the speed, productivity, and the financial return of the product development process.

Strategic Planning

Strategic Planning is the process by which senior executives set company performance objectives and make longer-term decisions of revenue planning, product portfolio management, and supply chain design. It represents a coherent, unifying and integrative pattern of decisions a firm makes.

InterProcess Planning

InterProcess Planning focuses on the tactical decision-making process at the enterprise level, and balances the competing goals of various business processes and functions, generating an enterprise-wide optimal use of resources: capital, people and physical assets. InterProcess Planning is a tactical planning tool that integrates across multiple eBPO processes and resources within an organization to achieve an enterprise-wide optimal solution.

Services

RHYTHM eXchange Services™ are a portfolio of shared information services for trading community members: customers, distributors, manufacturers and logistics providers. Information is presented to each individual with a secure view that matches their unique business rules and needs.

⁵ electronic Business Process Optimization

⁶ Enterprise Resource Planning

RHYTHM eXchange Services are unique in their ability to deliver the following capabilities:

- Intelligent comparative shopping engines that can find best price and best availability, while incorporating transportation costs and total delivered costs
- Support of both "strategic" trading processes such as forecast collaboration and product phase-out planning, as well as "spot" trading processes such as supply procurement and bid/auctioning
- Access to real-time advanced planning applications, which enable supply chain partners to work in concert to meet end-consumer demand

RHYTHM eXchange Services™ are delivered as individual services on a subscription basis. The initial service offerings enhance the trading activities within a business-to-consumer and business-to-business environment, from initial collaboration with your strategic partners, to fulfilling and tracking multi-vendor orders for your customers.

The initial RHYTHMeXchange Service offerings are:

- Collaborative Planning Service
 - Facilitates collaborative planning processes with suppliers
 - Provides improved demand forecasting among channel partners
 - Expedites component and raw material procurement
- Order Fulfillment Service
 - Provides personalized shopping experience with intelligent order fulfillment
 - Facilitates inventory visibility for reliable order fulfillment
 - Provides visibility to Supply Chain/Logistics Execution status
 - Provides multi-supplier landed cost and transport information
 - Facilitates merge-in-transit and whole order delivery with shared visibility of multiple fulfillment activities
- Advanced Tracking and Reporting Service
 - Facilitates global shipment tracking across multiple providers
 - Provides proactive monitoring of logistics events

Private Exchanges

Private exchange occurs when a company has a predetermined network of suppliers and/or customers that it wants to trade with. Examples that exist today include:

- Sun Microsystems and their suppliers
- Ford, their suppliers and their dealers
- Vanity Fair and their suppliers

RHYTHM eXchange Services provide software to run these exchanges, supporting both simple transactions as well as strategic collaboration processes in Supply Chain Management, Product Lifecycle Management and Customer Management.

Public Exchange

A public exchange occurs when companies buy and sell "on the open market." These can include exchanges of product, capacity (manufacturing, transportation or design) or information (travel). eBay is an example of a public exchange.

The Underlying Technology— RHYTHM Tone™

RHYTHM Tone™ is a standards-based framework that allows i2 products, i2 eBusiness services, and third party or legacy systems to inter-operate in a distributed, heterogeneous network (either private, VPN, or Internet).

RHYTHM Tone is not an i2 product. Rather, RHYTHM Tone is a brand that represents standards, specifications, and features of i2 solutions, whether developed internally or provided via a partner. An analogy would be the common data model.

Aspects of RHYTHM Tone available today include:

- RhythmLink with global messaging capabilities.
- EDI Mapping and translation capabilities via our Sterling Partnership.
- XML interface to the i2 Demand Fulfillment engine.
- Distributed communication protocols being built into the Internet Fulfillment Server.
- i2 Security Manager (enables single log-on across multiple i2 solutions).
- Hosting services.

Partnerships

In order to provide a full eBusiness service offering, i2 Technologies has partnered with a number of firms. These fall into four categories:

- Implementation.
- Hosting providers.
- Complementary software.
- Content.

Implementation partners provide a number of services above and beyond i2's standard implementation services. These can include change management, specific industry expertise such as industry "best practices" that span transactional processes and implementation of third party software.

Hosting partners provide the i2 applications on an as-needed basis. The benefit for companies is the ability to outsource the IT costs while providing the flexibility to expand and contract their IT costs in line with use.

i2 Technologies is proud of the scope of the solutions we provide. However, there are some areas where we have chosen to use complementary software partners to take advantage of their in-depth expertise. Typically these partners provide such technology components as network monitoring and recovery tools or transaction focused solutions such as warehouse or order management.

A list of partners for i2 can be found at www.i2.com, under Alliances.

How Do You Get Started?

Our first step is to meet with you and your staff to understand your critical business issues and conduct an eBusiness audit and review. Once we understand your particular issues, we advise you on the right solution.

Unlike many other software companies that enter "demo wars", we believe the best proof of our software is to give customer examples to show our eBusiness solutions delivering value. Once you feel confident that we can solve your eBusiness issues, we move to the next phase of determining the value you can achieve. During this assessment, analysis of your organizational readiness is tied to a step-by-step implementation plan, using our Business Release Methodology, which is also converted to a cash flow plan.

Business Release Methodology

To ensure a fast-paced, results-driven and focused supply chain management solution, i2 Technologies has developed its unique Business Release Methodology (BRM)— an implementation strategy that allows companies to achieve their most critical business goals and see bottom-line results as quickly as possible, while minimizing risk.

i2 targets the measurable business performance improvements identified in a company's Strategic Opportunity Assessment (SOA) and in the first phase of the BRM. An SOA identifies a company's opportunities for impressive cost savings and improvements in customer responsiveness for a significant competitive advantage. With these goals in mind, the first business release is designed to achieve a portion of these results in a short time frame. After the first business release has been implemented, others follow, in a continuous cycle of performance improvements. Best of all, the benefits achieved in each business release recover and usually exceed implementation costs. i2's BRM approach focuses the organization on capturing bottom-line benefits; reduces the uncertainty associated with an "all or nothing," one-time implementation, and builds momentum and excitement within the company. By focusing and delivering key performance results, the approach maximizes each customer's investment in intelligent eBusiness solutions.

Strategic Opportunity Assessment

i2 Technologies' intelligent eBusiness offering can help by immediately providing customer-centric solutions integrated with operational excellence. Two of the important hurdles to cross during the selection process are: creating a feasible implementation plan and a realistic business case. The SOA is designed to answer both of these challenges.

The SOA process is designed to provide companies considering a RHYTHM implementation with an understanding of the benefits they will receive and a timetable for achieving them.

During the SOA process, a team of experienced consultants from i2 Technologies works side by side with the company executives and managers who best understand the daily workings of the organization. Through individual and group interviews, as well as appropriate research and analysis, the SOA team quantifies the benefits possible with i2 solutions specific to the customer's situation.

The SOA team also develops an implementation plan in the form of a business release schedule aimed at resolving the organization's most critical issues. The plan details specific business benefits as the end deliverable of each business release.

As a key step in the SOA process, the SOA teams quantified benefits and implementation plan are then presented to the customer's executives.

Next, the implementation process begins with the first implementation of software functionality based on business release concepts. Each subsequent release provides additional incremental and measurable value *in as little as 60 to 120 days*.

Industry Examples

Virtually every industry has some use for intelligent eBusiness, be it manufacturing, distribution, services or some combination of those three. Listed below is a very brief list of simple examples from various industries to show the breadth and depth of solutions supported by RHYTHM.

Automotive

Service Parts Management. This sharing of inventory used for service parts between dealers and the manufacturers occurs from the start of a new model until years later. As time goes on this requirement changes from being exclusively demand pull from the dealers, to include buy-backs by the suppliers, at a significant discount, to liquidate the inventory. The benefits include:

- Increased customer service.
- Reduced inventories of parts.
- Reduced buy-backs (resulting in reduced write-downs).

"Spot" Inventory Buying. Examples can include such specialty items as tires that may be opened up for bids. Benefits include:

- Increased customer service.
- Reduced cost of goods sold.

Hi-Tech/Electronics

On-going manufacturing and distribution collaboration. This sharing of information on production requirements occurs throughout the supply chain, from retailers to OEM's to component suppliers, etc. This sharing of information includes forecast collaboration, planning collaboration, schedule collaboration and integrated distribution planning. The value of this exchange, typically a private domain, is:

- Reduced manufacturing cycle times.
- Reduced Work in Progress (WIP).
- Reduced Finished Goods (FG) inventories.
- Increased customer service.

Metals

Outsourced Manufacturing. From time to time, manufacturers may outsource capacity such as when dealing with low-level, high-volume parts. These would typically be handled with a public exchange, facilitating the following benefits:

- Reduced outsourcing costs.
- Improved customer service.

Sewn/Soft Goods (Also Known as Textile and Apparel)

Design Collaboration. When new models are being designed, OEM's and their design houses can use exchanges to publish information about these models including units forecasted. These would be private exchanges and would generate the following types of benefits:

- Reduced time to market.
- Increased ability to respond to demand fluctuations.

Summary

To be successful, companies need to be customer-centric to achieve sustainable growth. What is also necessary is that these companies need to be able to fulfill these customer needs with operational excellence, to manage the demand at profitable levels.

i2 Technologies is the only company that has the combination of software, services and partners to be able to meet the complete needs of companies to meet the challenging eBusiness marketplace. The RHYTHM suite goes beyond other companies visions by being able to deliver strategic relationship support to such processes as Customer Management, Supply Chain Planning and Product Lifecycle Management as part of our eBPO offering.

If you are a "bricks and mortar" company, i2 Technologies has the solution to quickly install the customer facing solutions you need, while integrating this with your back-end systems or upgrading your systems to have state-of-the-art supply chain planning. And if you are an eCommerce company, i2 provides the back-end systems to provide real-time fulfillment with known costs.

"A front-end Web site is often the easiest and least differentiating section of an effective Web strategy ... A little-discussed, not-so-pleasant fact is that many Web commerce transactions are unprofitable because of back-end fulfillment problems."

Gartner Group,
"The Fallacies of Web Commerce Fulfillment"
April 1999 B. Enslow

"The first mover does not always win. The importance of being first is a mantra in the Internet world, but it's wrong. The ones that are the most efficient will be successful," said one retail analyst. "In retailing, anyone can build a great looking store. The hard part is building a great-looking store that makes money."

Barron's
May 31, 1999